

†Harry SMITH: New species of Gentianaceae from Nepal*

†H. スミス: ネパール産リンドウ科の新種

1) *Gentianella angustiflora* H. Smith, sp. nova

Planta hapaxantha, gracilis, erecta, 6-22 cm alta; caulis inferiori parte obsolete nigro-papillosus, ex axillis graciliter pauci-ramosus, ramis suberectis; folia caulina 4-7-paria internodiis multories breviora; flores vulgo nutantes, graciliter pedicellati.

Folia rosularia evanida, caulina infima interdum spathulata obtusa, cetera lanceolata, acuta, 6-15×1.5-4 mm magna, margine inferiori parte obsolete papilloso-scabridula. *Flores* purpureo-coerulei, angusti, 5-9 mm longi, ore vix 2 mm lati; calycis tubus 1 mm longus, lobi, interdum paullo inaequales, ovato-lanceolati, acuti, mutici, basin versus minute scabriduli, 2.8-4.5 mm longi, 1.2-1.6 mm lati; corollae tubus cylindraceus, ca. 6 mm. longus, lobi suboblongi, obtusi, 2.5 mm longi et 1.5 mm lati, nectariis pro lobo binis; stamina tubo 2.7 mm alte adnata, filamentis liberis 2.5 mm longis, thecis subrotundatis 0.7 mm longis et fere aequilatis; ovarium sessile, stigmatibus applanatis sessilibus; capsula submatura cylindracea, sursum modice angustata, 7 mm longa et 1.4 mm crassa, seminibus submaturis ovoideo-globosis, 0.6×0.5 mm magnis, testa levi.

Holotypus: Nepal, Sabze Khola, 3900 m, flowers dull blue-purple, leaves and stem stained purple, stony slope in spray of a waterfall, Sept. 5, 1950 (D.G. Lowndes 1490, BM).

Nepal: East of Chalike Pahar, 4200 m, Sept. 21, 1954 (Stainton, Sykes & Williams 4523); Sandak, 4050 m, Aug. 18, 1954 (Stainton, Sykes & Williams 7310); Lulo Khola, 4500 m, Sept. 19, 1952 (Polunin, Sykes & Williams 3516); Khaptang, Nuru Khola, 4500 m, Aug. 21, 1952 (Polunin, Sykes & Williams 5363).

Kumaun: Teksain, Sept. 1929 (Miss G.E. Benham).

* The following species of *Gentianella* and *Lomatogonium* were diagnosed, described and typified by the late Harry Smith of Uppsala but were left unpublished at his death in 1971. They are here printed from his manuscripts. A.O. Chater, Department of Botany, British Museum (Natural History), Cromwell Road, London SW7.

2) **Gentianella lowndesii** H. Smith, sp. nova

Planta biennis, pauciramosa, ca. 10 cm alta (3-29), *G. moorcroftianae* (Wall.) Airy-Shaw, subsimilis, sed longe distat: corolla sinistrotorta (nec dextrotorta), lobis corollae subquadrangularibus tubo 4-plo brevioribus (nec elongato-ovatis, tubo minus quam duplo brevioribus), calyce omnino glabro (nec in marginibus argute papilloso).

Caulis simplex vel vulgo pauciramosus, ramis suberectis uni- vel paucifloris. *Folia* caulina 4-5-juga, internodiis breviora, infima lingulata, petiolata, ca. 9 mm longa et 4 mm lata, superiora anguste lanceolata, acuta, ad 14 mm longa, 1.5-4 mm lata. *Flores* ampli, purpureo-coerulei, nutantes, 15-20 mm longi, 1.5-3.5 cm pedicellati; calycis tubus 3-4 mm longus, lobi saepe paullo inaequales, arcuato-patentes, lanceolati, ad 9 mm longi et 1-2(3) mm lati; tubus corollae 16 mm longus, ore (in sicco) 7 mm lati, adenis melliferis pro sectione duo 1 mm alte sitis, lobi obtusi, 4 mm longi et 3.5-4 mm lati; stamina tubo 4 mm alte adnata, filamentis liberis 7 mm longis, thecis 1.7 mm longis, vix 1 mm crassis; ovarium 2.5 mm longe stipitatum, cylindraceum, basi et apice modice attenuatum, 10 mm longum et 2 mm crassum, stylo subnullo, stigmatibus applanatis. Capsula, semina non visa.

Holotypus: Nepal, Bimtakothi, 3900 m, flowers dull purplish, glacier moraine, Sept. 13, 1950 (*D. G. Lowndes 1541*, BM); ibidem, 4059 m, Aug. 27, 1950 (*D. G. Lowndes 1470*).

Nepal: Bogadi Khola, 3600 m, Aug. 11, 1954 (*Stainton, Sykes & Williams 3824*); Rotagaon, Suli Gad, 3300 m, Sept. 14, 1952 (*Polunin, Sykes & Williams 3382a*); Lulo Khola, 4500 m, Sept. 18, 1952 (*Polunin, Sykes & Williams 3479*).

This last collection is slightly divergent from the rest. Most specimens have simple, one-flowered stems, the mouth of the corolla-tube is up to 10 mm wide, and the lanceolate calyx-lobes are up to 3 mm broad.

3) **Lomatogonium graciliflorum** H. Smith, sp. nova

Biennis, omnino glabra, gracilis, erecta, 10-40 cm alta, e nodis paucis pyramidatim ramosa, ramis sursum sensim abbreviatis arcuatim adscendentibus. Flores graciliter pedicellati, angusti, cinereo-coerulei, 8-11 mm longi, corollae lobis e centro visis dextrotortis; glandula nectarifera singula membrana tenue simplici oblecta, qua membrana supra glandulam bifida et in alis liberis, angustis producta.

Folia basalia florendi tempore evanida, caulina ca. 7-juga, internodiis vulgo multo breviora, media majora, subpetiolata, lanceolata, subacuta, 1.5-2 cm longa et ad 0.7 cm lata, superiora anguste lanceolata, vix 1 cm longa et 0.2 cm lata. *Flores* 5-meri, erecti; calycis tubus campanulatus, 1.5 mm longus, lobi paullo inaequales, anguste lanceolati vel attenuato-lineares, acuti, ad 5 mm longi, c. 1 mm lati; corollae tubus 2.5-3 mm longus, glandulis nectariferis pro lobo singulis, inter nervos filamentorum 1 mm alte locatis, instructus, glandula membrana tenue simplici, apice bifida et libera oblecta, eaque parte in alam tenuissimam, subintegram, ad 1.5 mm longam et basi 0.2 mm latam producta; corollae lobi elliptici, subacuti, 5.5-6 mm longi et 2.5 mm lati; stamina tubo 1.5 mm alte adnata, filamentis liberis ad 4 mm longis, thecis 1 mm; ovarium sessile, elongato-ovatum, ovulas in inferiori 3/4 partibus solum producent, stylo deficiente, area stigmatifera apicale et c. 2 mm in lateribus decurrente; capsula matura 10-11 mm longa corollam paullo superans, ovoideo-cylindracea, basi 2.5 mm crassa, seminis globoso-ovalibus, 0.8×0.6 mm magnis, pro capsula 21-32, testa levi.

Holotypus: Nepal, Bheding, 3600-3900 m, 1930 (*Lall Dhwoj* 284, BM).

Nepal: Khangsar, 4500 m., margins of marshy ground, flowers pale grey-blue veined with blue, leaves and stem reddish, Sept. 9, 1950 (*D.G. Lowndes* 1500); Kali Gandaki valley, Tukucha, 3750 m., Sept. 11, 1954 (*Stainton, Sykes & Williams* 7766a); Taglung (south of Tukucha), 3600 m. (*Stainton, Sykes & Williams* 7958); near Chalike Pahar, 4200 m., Sept. 26, 1954 (*Stainton, Sykes & Williams* 4609); east of Chalike Pahar, 4200 m., Sept. 23, 1954 (*Stainton, Sykes & Williams* 4571); near Dhorpata, 3000 m., Oct. 13, 1954 (*Stainton, Sykes & Williams* 9015); Saipal, 4500 m., Sept. 2, 1954 (*J.E.M. Arnold* 325b).

Easily distinguished from the other biennial species in Nepal by its corolla-lobes dextrorsely imbricate in bud.

4) *Lomatogonium micranthum* H. Smith, sp. nova

Annua, omnino glabra, ca. 10 cm alta (vel ultra), pyramidatim gracillime ramosa, floribus numerosis, 6-7 mm longis, tenuissime 6-12 mm longe pedicellatis.

Caulis stricte erectus, basi ad 0.6 mm crassus, 8-10-nodosus, e nodis omnibus ramosus, ramis suberectis, infimis ad 4.5 cm longis, superioribus sensim abbreviatis. *Folia* caulina ovato-lanceolata, acuta, emucronata, infima ad 8 mm longa et 2.5-3 mm lata, superiora et ramulina gradatim diminuta, *Flores* albi, 5-meri; calycis tubus vix 1.5 mm longus, basi acuto obconicus, lobi attenuato-

lineares, acuti, 4.5 mm longi et 1 mm lati; corollae tubus perbrevis, lobi lanceolati, acuti, 5-6 mm longi, ca. 2 mm lati, nectariis binis ad basin staminum locatis, stipulis staminalibus minutis, alaeformibus 0.5 mm longis et 0.2 mm latis obtectis; stamina tubo 1 mm alte adnata, filamentis liberis 3 mm longis, thecis apice acute appendiculatis 1.2 mm longis; ovarium sessile, ovato-cylindraceum, stylo deficiente, areis stigmatiferis apicalibus et c. 1.5 mm longe decurrentibus. Capsula mature-scens 7.5 mm longa et 2.5 mm crassa, ovulis globosis, 0.2 mm diametentibus.

Holotypus: Nepal, above Gurjakhani, 2850 m., among moss turf on open slope, flowers white, Sept. 15, 1954 (*Stainton, Sykes & Williams 4426*, BM).

S. E. Tibet, Kongbo Prov., Nyang Chu, Kyabden, 3000 m., 29°40'N.-94°16'E., Aug. 31, 1938 (*Ludlow, Sherriff & Taylor 6200*).

Differs from *L. chumbicum* (Burkill) H. Sm. chiefly in having the stem strictly erect, with ascending branches from the base (not stem usually branching copiously from the base), leaves and calyx-lobes narrow, acute (not broad and obtuse), and capsule with c. 50 seeds (not 11-18).

The Tibetan plant of *L. micranthum* looks somewhat different from the type. It is larger, up to 20 cm high, bearing c. 70 flowers, with the largest basal branch 14 cm long. The cauline leaves are not ovate-lanceolate but very narrow ovate with a strong tendency to conduplication, the biggest 14 mm long by 4 mm broad. The floral organization is, however, exactly the same as in the type. It may eventually represent a local race of the species.

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ウブサラの H. スミスはロンドン大英博物館にあるリンドウ科の標本を同定し記載を用意したが、1971年死去して未発表のままになっていた。本報にはその中から次の4新種を発表する。

Gentianella angustiflora (ネパール, クマオン)。

G. lowndesii (ネパール)。

Lomatogonium graciliflorum (ネパール)。

L. micranthum (ネパール, チベット)。